

Statement of
Duke Hartman, P.E.
Vice President, Business Development
Makai Ocean Engineering, Inc.
before the
COMMITTEE ON WAYS AND MEANS
Wednesday, April 4, 2018
10:30 a.m.
State Capitol, Conference Room 211
In consideration of
HB2075, HD2 SD1
RELATING TO ENERGY

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Committee on Ways and Means

Makai Ocean Engineering, Inc. **STRONGLY SUPPORTS HB2075, HD2 SD1** that re-establishes the Alternative Energy Research and Development Pilot Program and appropriates funds for the Program.

Makai is a locally-owned and operated technology company based in Hawai'i for over 44 years. One of the driving reasons behind Makai's existence is to help Hawai'i achieve energy independence using clean, alternative and renewable resources.

Hawai'i is blessed with abundant natural resources such as wind, solar, geothermal, hydro, biofuels, and ocean energy. While wind and especially solar contributions to the energy portfolio are now commercial and have grown significantly, other options like ocean energy have the potential to significantly contribute to the supply of base load / firm / constant renewable power, but are worryingly underrepresented. These alternative options are at the same place solar and wind was 20 years ago, and require R&D to reach the same level of maturity and commercialization.

Makai is currently performing R&D and working towards commercialization of ocean thermal energy conversion (OTEC) and at the Natural Energy Laboratory of Hawai'i Authority (NELHA) in Kailua-Kona. Makai employs eight highly-paid, highly-skilled engineers and scientists in the high tech / renewable energy field in rural Kailua-Kona. This program has achieved a huge milestone of connecting to the grid, making Hawai'i the home of the world's largest operational OTEC plant, and the clear leader in the emerging market of ocean thermal energy. Plans are in the works for new developments to move this technology even further.

Governor David Ige was present to dedicate the power plant and 'flip the switch,' and in his keynote address he said, "One big difference with OTEC is that it is a firm power source; it allows us to generate electricity consistently... and in the evening hours when other renewable sources are not available, which really is the key to a 100% renewable future."

With the help of programs like this bill, Makai has been able to secure additional competitively awarded federal funding from the U.S. Navy, and bring home national honors,



such as the Small Business Administration's Tibbetts Award. This national award recognizes the very best in small innovative companies in the country whose technologies have made a strong economic impact in terms of high paying jobs, and demonstrating success in actually commercializing federal R&D and increasing taxable revenue for the state.

This is why we **STRONGLY SUPPORT HB2075, HD2 SD1**. Not only would this program develop alternative energy technology for our 100% renewable future, it would enable our tech industry to compete and win more federal funds for technology development and support high-paying, highly-skilled professional jobs for our keiki here at home.

Thank you for the opportunity to offer these comments.

HB-2075-SD-1

Submitted on: 4/3/2018 10:46:39 AM

Testimony for WAM on 4/4/2018 10:30:00 AM

LATE

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Matsuura	Individual	Support	No

Comments: